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<b>Notice of Allowability</b>	Application No.	Applicant(s)	
	10/511,310	HASEGAWA ET AL.	
	Examiner	Art Unit	
	Theresa Trieu	3748	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--  
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the applicants' amendment filed on Dec. 14, 2006.
2. ☒ The allowed claim(s) is/are 5-24.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

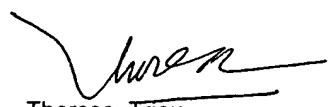
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date <u>March 14, 2007</u>.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
|---|---|

  
 Theresa Trieu  
 Primary Examiner  
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### EXAMINER'S AMENDMENT

This Office Action is responsive to the applicants' amendment filed on Dec. 14, 2006.

Claims 7-9 have been amended. Claims 1-4 have been canceled. Claims 11-24 have been added. Thus, claims 5-24 are pending in this application.

Applicants' cooperation in correcting the informalities in the drawing and specification are appreciated.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Herbert F. Ruschmann (Reg. No. 35,341) on March 14, 2007. During telephone conversation with Mr. Ruschmann, an agreement was reached to amend Claims 5, 6, 8, 11 and 12. The application has been amended as follows:

- Claim 5: page 8, line 2, "by means of an operating fluid" has been changed to -- by the operating fluid --.

- Claim 6: page 8, line 2, "by means of an operating fluid" has been changed to -- by the operating fluid --.

- Claim 8: page 10, line 3, --of said rotor" has been inserted after "circumference".

- Claim 11: page 14, line 15, "by an operating fluid" has been changed to -- by the operating fluid --.

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- Claim 12: page 15, line 23, "by an operating fluid" has been changed to -- by the operating fluid --.

*Allowable Subject Matter*

Claims 5-24 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claims 7 and 8: Applicants' amendments to the claims and arguments (presented in the Remarks section, pages 24-25) have overcome the cited prior art.

Regarding claim 9: In the amendment filed on Dec. 14, 2006, dependent claim 9 has been rewritten in independent form including all the limitations of the base claim and any intervening claim; therefore, claim 9 is allowed.

Regarding claims 11 and 12: In the amendment filed on Dec. 14, 2006, dependent claims 5/8 and 6/8 has been rewritten in independent form including all the limitations of the base claim and any intervening claim as new claims 11 and 12; therefore, claims 11 and 12 are allowed.

Regarding claim 15: the prior art fails to disclose or render obvious the claimed combination including: the intake port being positioned to end communication with the operating chambers when an immediately preceding one of the operating chambers expands to the maximum volume  $V_c$ ; the first and second discharge ports having an external discharge pressure ( $P_d$ ) and the discharge pressure ( $P_d$ ) being greater than a pressure ( $P_c$ ) of expanded fluid in the operating chambers at the maximum volume  $V_c$ ; and the first discharge port being positioned so that the operating chambers are compressed starting immediately after the operating chambers communicate with the first

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discharge port and are compressed to provide a pressure a level greater than the discharge pressure (Pd) to open the valve mechanism.

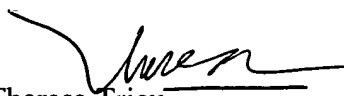
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 571-272-4868. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TT  
March 14, 2007

  
Theresa Trieu  
Primary Examiner  
Art Unit 3748